TSMC-02-1079

2002.04

U.S. Patent 6,372,301 to Narasimhan et al., "Method of Improving Adhesion of Diffusion Layers on Fluorinated Silicon Dioxide," discloses a hydrogen plasma treatment of a fluorinated SiO2 layer.

2002.02

U.S. Patent 6,346,488 to Kabansky, "Process to Provide
Enhanced Resistance to Cracking and to Further Reduce the
Dielectric Constant of a Low Dielectric Constant Dielectric
Film of an Integrated Circuit Structure by Implantation with
Hydrogen Ions," discloses a hydrogen ion implant to inhibit
cracking in a low k film performed with a plasma immersion ion
implantation.

2001.03

U.S. Patent 6,204,204 to Paranjpe et al., "Method and Apparatus for Depositing Tantalum-Based Thin Films with Organmetallic Precursor," describes a plasma treatment with Ar/H2.

2003.03

U.S. Patent 6,528,423 to Catabay et al., "Process for Forming Composite of Barrier Layers of Dielectric Material to Inhibit Migration of Copper from Copper Metal Interconnect of Integrated Circuit Structure into Adjacent Layer of Low K Dielectric Material," discloses a plasma treatment which improves resistance in a SiC barrier layer to Cu migration.

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